

General Permit No.: Air510

Effective date: December 1, 2002

GENERAL PERMIT FOR NONMETALLIC MINERAL PROCESSING

In compliance with the provisions of the Air Pollution Control Law and regulations adopted pursuant to it, owners of nonmetallic mineral processing facilities are authorized to operate under the authority of this permit, except those where board regulations or policies prohibit such operation.

This general permit covers all owners of activities located at nonmetallic mineral processing facilities where the primary purpose is classified as Standard Industrial Classifications 1411, 1422, 1423, 1429, 1442, 1446, 1455, 1459, and 1499.

The authorization to operate under this permit shall be in accordance with this cover page, Article 1 – Emission Standards and Requirements, Article 2 – Emission Standards, Article 3 – Compliance Determination and Verification by Emission Testing, Article 4 – Compliance Determination and Verification by Emission Monitoring, Article 5 – Recordkeeping Requirements, Article 6 – Reporting Requirements, Article 7 - Compliance Certifications, and Article 8 - Enforcement, as specified in Articles 1 through 8 of this permit.

Article 1.

EMISSION STANDARDS AND REQUIREMENTS.

A. The permittee may construct and operate a nonmetallic mineral processing facility in accordance with conditions of this permit located within the boundaries of the Commonwealth of Virginia, except those where board regulations or policies prohibit such activities.

B. Sources operating under this permit shall operate in compliance with the standards set in 9 VAC 5 Chapters 40 (9 VAC 5-40-10 et seq.), 50 (9 VAC 5-50-10 et seq.) and 60 (9 VAC 5-60-10 et seq.) and other applicable provisions of the regulations of the board.

C. Sources operating under this permit shall meet the emission standards in Article 2 of this general permit in order to continue to operate under the authority of this permit.

D. The permittee shall comply with the terms and conditions of the general permit prior to commencing any physical or operational change or activity which will result in making the facility subject to the new source review program.

E. If the permittee makes any change in the design or operation of the facility which will result in making the facility subject to the new source review program, he shall

evidence the change in writing to the department within 30 days of implementation of the change.

F. The permittee shall not make any changes in design or operation of the affected facility which will result in actual emissions that exceed the emission standards specified in Article 2 of this general permit.

## Article 2. EMISSIONS STANDARDS.

A. The permittee shall not cause or allow to be discharged into the atmosphere from any covered emissions units any visible emissions in excess of the limits specified in subdivisions 1, 2 and 3 of this subsection.

1. Equipment manufactured or fabricated on or prior to August 31, 1983, shall not exceed an opacity of 20% when averaged over a six-minute period.

2. Equipment manufactured or fabricated after August 31, 1983, shall comply with 40 CFR Part 60, Subpart 000, 9 VAC 5-50-260 and the following standards:

a. Crushing: primary and secondary--15% opacity, tertiary--7% opacity.

b. Screening, conveyor transfers, and surge bins--10% opacity.

c. Fabric filter exhausts--7% opacity.

d. Wash plants--no visible emissions from wet screening and subsequent processing up to next crusher or storage bin.

3. Other nonspecific emission points including loadout and stationary diesel engines are limited to 10% opacity.

4. The opacity standards prescribed under this article shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. This subdivision shall apply only to (i) emission units, the construction, modification or relocation of which commenced on or after March 17, 1972; and (ii) emission units, the reconstruction of which commenced on or after December 10, 1976.

B. The permittee shall not cause or allow to be discharged into the atmosphere from any covered emissions units any particulate matter in excess of the limits specified in subdivisions 1 and 2 of this subsection.

1. Fabric filter exhausts controlling equipment manufactured or fabricated on or prior to August 31, 1983, shall not exceed the following limits:

a. For facilities located in AQCR 7, the limits in Table 510A (ref: 9 VAC 5-40-270).

b. For facilities located in the remainder of the Commonwealth, 0.05 grains/dscf (ref: Article 14 (9 VAC 5-40-1820 et seq.) of 9 VAC 5 Chapter 40).

TABLE 510A

Process Weight Rate		Maximum Allowable Emission Rate
Lb/Hr	Tons/Hr	Lb/Hr
100	0.050	0.46
150	0.075	0.66
200	0.100	0.85
250	0.125	1.03
300	0.150	1.20
350	0.175	1.35
400	0.200	1.50
450	0.225	1.63
500	0.250	1.77
550	0.275	1.85
600	0.300	2.01
650	0.325	2.12
700	0.350	2.24
750	0.375	2.34
800	0.400	2.43
850	0.425	2.53
900	0.450	2.62
950	0.475	2.72
1000	0.500	2.80
1100	0.55	2.97
1200	0.60	3.12
1300	0.65	3.26
1400	0.70	3.40
1500	0.75	3.54
1600	0.80	3.66
1700	0.85	3.79
1800	0.90	3.91
1900	0.95	4.03
2000	1.00	4.14
2100	1.05	4.24
2200	1.10	4.34
2300	1.15	4.44
2400	1.20	4.55
2500	1.25	4.64

2600	1.30	4.74
2700	1.35	4.84
2800	1.40	4.92
2900	1.45	5.02
3000	1.50	5.10
3100	1.55	5.18
3200	1.60	5.27
3300	1.65	5.36
3400	1.70	5.44
3500	1.75	5.52
3600	1.80	5.61
3700	1.85	5.69
3800	1.90	5.77
3900	1.95	5.85
4000	2.00	5.93
4100	2.05	6.01
4200	2.10	6.08
4300	2.15	6.15
4400	2.20	6.22
4500	2.25	6.30
4600	2.30	6.37
4700	2.35	6.45
4800	2.40	6.52
4900	2.45	6.60
5000	2.50	6.67
5500	2.75	7.03
6000	3.00	7.37
6500	3.25	7.71
7000	3.50	8.05
7500	3.75	8.39
8000	4.00	8.71
8500	4.25	9.03
9000	4.50	9.36
9500	4.75	9.67
10000	5.00	10.00
11000	5.50	10.63
12000	6.00	11.28
13000	6.50	11.89
14000	7.00	12.50
15000	7.50	13.13
16000	8.00	13.74
17000	8.50	14.36
18000	9.00	14.97
19000	9.50	15.58
20000	10.00	16.19
30000	15.00	22.22

40000	20.00	28.30
50000	25.00	34.30
60000 or more	30.00 or more	40.00

2. Fabric filter exhausts controlling equipment manufactured or fabricated after August 31, 1983, shall not exceed 0.05 g/dscm (0.022 grains/dscf) (ref: 40 CFR Part 60, Subpart 000).

C. Fugitive dust/emissions controls shall include the following or equivalent as a minimum:

1. Fugitive dust/emissions from drills, stockpiles, material handling, screens, crushers, load-outs, and traffic areas shall be controlled by wet suppression or equivalent.

2. All material being stockpiled subject to windblown emissions shall be kept moist to control dust during storage and handling or covered at all times to minimize emissions.

3. Haul roads shall be controlled by wet suppression or equivalent.

4. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Materials spilled or tracked onto public paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

D. In order to operate under the authority of this permit, a nonmetallic mineral processing facility shall not exceed any of the following:

1. The total rated crushing capacity for all primary crushers at the facility, including portable stone processing equipment temporarily located at the site, shall not exceed 5,000 tons per hour.

2. The total amount of fuel to be consumed by all stationary diesel engines, including portable equipment temporarily located at the site, shall not exceed 331,022 gallons of fuel per annual period.

3. The total actual emissions of any regulated pollutant from the stationary source shall not exceed 99 tons per annual period. Particulate matter emissions shall be used to determine compliance with this subdivision only if particulate matter (PM<sub>10</sub>) emissions cannot be quantified in a manner acceptable to the department.

E. The fuel used in stationary diesel engines shall be distillate oil or diesel fuel meeting ASTM specifications for No. 1 or No. 2 distillate oil or diesel fuel.

### Article 3.

### COMPLIANCE DETERMINATION AND VERIFICATION BY EMISSION TESTING.

A. The permittee may conduct emission tests, establish and maintain records, and make periodic emission reports as necessary to determine the actual emissions for the nonmetallic mineral processing facility.

B. Upon request of the department, the permittee shall conduct emission tests as are necessary to determine the type or amount or both of the pollutants emitted from the facility or whether the facility will be in compliance with Article 2 of this general permit or any other provisions of any regulation of the board.

C. The emission testing conducted under this article shall be carried out in accordance with subdivisions 1 and 2 of this subsection or the provisions of 9 VAC 5 Chapters 40 (9 VAC 5-40-10 et seq.), 50 (9 VAC 5-50-10 et seq.) and 60 (9 VAC 5-60-10 et seq.), as applicable, or by other means acceptable to the department.

1. Visible emissions evaluations shall be conducted in accordance with 40 CFR Part 60, Subpart A, Method 9 or Method 22, as applicable.

2. Grain loading evaluations shall be conducted in accordance with 40 CFR Part 60, Subpart A, Method 5 or Method 17, as applicable.

#### Article 4.

#### COMPLIANCE DETERMINATION AND VERIFICATION BY EMISSION MONITORING.

A. The permittee may install, calibrate, operate and maintain equipment for continuously monitoring and recording emissions or process parameters or both, and establish and maintain records, and make periodic emission reports as necessary to determine the actual emissions for the nonmetallic mineral processing facility.

B. Upon request of the department, the permittee shall install, calibrate, maintain and operate equipment for continuously monitoring and recording emissions or process parameters or both as are necessary to determine the type or amount or both of the pollutants emitted from the facility or whether the facility will be in compliance with Article 2 of this general permit or any other provisions of any regulation of the board.

C. The emission monitoring conducted under this article shall be carried out in accordance with the provisions of 9 VAC 5 Chapters 40 (9 VAC 5-40-10 et seq.), 50 (9 VAC 5-50-10 et seq.) or 60 (9 VAC 5-60-10 et seq.), as applicable, and 40 CFR 60.674 or by other means acceptable to the department.

D. Where the applicable requirement cited in subsection C of this article does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring shall be conducted sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the general permit, as reported pursuant to subdivision C 1 of Article 5 of this general permit. Such monitoring requirements shall assure use of terms,

test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements of this subsection.

Article 5.  
RECORDKEEPING REQUIREMENTS.

A. The permittee shall comply with the recordkeeping requirements in this article. The recordkeeping requirements of this permit shall not replace any recordkeeping requirement contained in other state or federal rules or regulations.

B. The permittee shall maintain records for each emission unit or groups of emission units sufficient to determine the actual emissions of the nonmetallic mineral processing facility. The permittee shall maintain records of emission data and operating parameters necessary to demonstrate compliance with this permit. These records shall be available for inspection by the department and shall be current for the most recent three years.

C. To meet the requirements of Article 4 of this general permit with respect to recordkeeping, the permittee shall comply with the following:

1. Records of monitoring information shall include the following:

a. The date, place as defined in the authorization to operate under the general permit, and time of sampling or measurements.

b. The date(s) analyses were performed.

c. The company or entity that performed the analyses.

d. The analytical techniques or methods used.

e. The results of such analyses.

f. The operating conditions existing at the time of sampling or measurement.

2. Records of all monitoring data and support information shall be retained for at least three years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

D. The recordkeeping requirements under this article shall be carried out in accordance with the provisions of 9 VAC 5 Chapters 40 (9 VAC 5-40-10 et seq.), 50 (9

VAC 5-50-10 et seq.) and 60 (9 VAC 5-60-10 et seq.), as applicable, or by other means acceptable to the department.

E. In order to ensure the proper operation of air pollution control equipment, the permittee shall perform the following:

1. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance to air pollution control equipment. These records shall be maintained on site for three years and shall be made available to department upon request.

2. Maintain an inventory of spare parts needed to minimize the duration of air pollution control equipment breakdowns.

#### Article 6. REPORTING REQUIREMENTS.

A. The permittee shall comply with the reporting requirements in this article. Any document (including reports) required by a permit term or condition to be submitted to the department shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-510-100 E.

B. The permittee shall submit, according to procedures established by the department, an annual emissions update. Any additional information requested by the department under this subsection shall be submitted to the department within 30 days of the date of request.

C. To meet the requirements of Article 4 of this general permit with respect to reporting, the permittee shall submit reports of any required monitoring at least every six months. All instances of deviations from permit requirements shall be clearly identified in such reports.

D. The permittee shall furnish written notification to the department and the regional office of the U.S. Environmental Protection Agency of the following:

1. The actual date on which construction or installation or modification or reconstruction or relocation of any emission unit commenced, postmarked within 30 days after that date.

2. The actual startup date of the emission unit within 15 days after that date.

3. The anticipated date of visible emissions evaluations for affected facilities subject to 40 CFR Part 60, subpart OOO postmarked at least 30 days prior to that date.

4. The anticipated date of stack emissions tests of the affected facilities subject to 40 CFR Part 60, subpart OOO postmarked at least 30 days prior to that date.



E. Within 30 days of completion, the permittee shall furnish written notification of equipment replacement, to include the following information, as applicable (for crushing, grinding, screening, elevator/belt conveying, bagging, storage bins, and truck/rail enclosed loading stations):

1. The rated capacity, in tons per hour, of the crusher being replaced; and the replacement crusher.
2. The total surface area of the top screen deck of:
  - a. The screening operation being replaced; and
  - b. The replacement screening operation.
3. The conveyor belt width of:
  - a. The conveyor operation being replaced; and
  - b. The replacement conveyor.
4. The rated storage capacity, in tons, of:
  - a. The bins being replaced; and
  - b. The replacement bins.
5. A description of the control device used to reduce particulate matter emissions from the equipment and a list of all other pieces of equipment controlled by the same device.
6. The estimated age of the emissions units being replaced.
7. The identification of the emission standards applicable to the equipment being replaced and the replacement equipment.

F. The permittee shall comply with the reporting requirements of 9 VAC 5-20-180 concerning facility and control equipment maintenance or malfunction.

#### Article 7. COMPLIANCE.

A. The department will evaluate a nonmetallic mineral processing facility's compliance with the emission standards in Article 2 of this general permit as part of the department's annual compliance process. In performing the evaluation, the department

will consider any annual emission update submitted pursuant to Article 6 of this general permit.

B. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the department to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

Department representatives will report to the site office and notify a company official or representative of their presence immediately upon entering any operation, as required by Mine Safety and Health Agency standards. For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

#### Article 8. ENFORCEMENT.

A. Violation of this permit is subject to the enforcement provisions including, but not limited to, those contained in 9 VAC 5 Chapter 170 (9 VAC 5-170-10 et seq.) and §§ 10.1-1309, 10.1-1309.1, 10.1-1311 and 10.1-1316 of the Virginia Air Pollution Control Law.

B. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

C. The permittee shall comply with all conditions of the permit. Any permit noncompliance constitutes a violation of the Virginia Air Pollution Control Law and is grounds (i) for enforcement action or (ii) for suspension or revocation of the authorization to operate under the general permit.

D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

E. The authorization to operate under the general permit may be suspended or revoked for cause as specified in 9 VAC 5-510-80. The filing by the permittee of a (i) request for reauthorization to operate under the general permit, or (ii) notification of termination, planned changes or anticipated noncompliance does not stay any permit condition.

F. The owner of the nonmetallic mineral processing facility shall be subject to enforcement action under 9 VAC 5-510-80 for operation without a permit if the facility is later determined by the department not to qualify for the conditions and terms of the general permit.

G. The general permit does not convey any property rights of any sort, or any exclusive privilege.

H. The permittee shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for suspending or revoking the authorization to operate under the general permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the department copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the department along with a claim of confidentiality meeting the requirements of 9 VAC 5-170-60.